1. A display controller for providing a luminance value to a display comprising:

an original gamma correction mapping table containing entries describing a default luminance value to be provided said display for a magnitude of a video input signal;

a gamma correction transform circuit in communication with the original gamma correction mapping table to receive said entries and connected to receive a contrast signal and a brightness signal and from said contrast signal and brightness signal transform said entries to transformed luminance values; and

a transformed gamma correction mapping table in communication with the gamma correction transform circuit to receive the transformed luminance values, said gamma correction mapping table connected to receive a video signal whereby said video signal provides a pointer to said luminance values.

2. The display controller of claim 1 wherein the gamma correction transform circuit executes the function:

$$G\_new(i) = G\_orig((i * a) + b)$$

where:

i is a counter representing potential magnitude values of the video signal,

G_new(i) is the transformed value of the luminance value for an ***i*th** magnitude,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

3. The display controller of claim 1 wherein the gamma correction transform circuit executes the function:

$$G\_new(i) = G\_orig(C_i)$$

where:

$$\begin{aligned} C_i &= b \quad | i = 0 \\ C_i &= C_{i-1} + a \,| i > 0 \end{aligned}$$

C_i is a pointing variable to the luminance values in the original gamma correction mapping table,

i is a counter representing potential magnitude values of the video signal,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

4. The display controller of claim 1 wherein the gamma correction transform circuit is a microcontroller.

5. The display controller of claim 4 wherein the microcontroller executes a program process that performs the function:

$$G\_new(i) = G\_orig((i * a) + b)$$

where:

i is a counter representing potential magnitude values of the video signal,

G_new(i) is the transformed value of the luminance value for an ***i*th** magnitude,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

6. The display controller of claim 4 wherein the microcontroller executes a program process that performs the function:

$$G\_new(i) = G\_orig(C_i)$$

where:

$$C_i = b \;\Big|\; i = 0$$
$$C_i = C_{i-1} + a \;\Big|\; i > 0$$

C_i is a pointing variable to the luminance values in the original gamma correction mapping table,

i is a counter representing potential magnitude values of the video signal,

***a** is a magnitude of the contrast signal, and*

***b** is a magnitude of the brightness signal.*

7. The display controller of claim 4 wherein the original gamma correction mapping table is digital data stored in a memory.

8. The display controller of claim 7 wherein the transformed gamma correction mapping table is digital data stored in the memory.

9. A display control system for providing luminance values to a display comprising:

a microcontroller connected to receive a video signal, a contrast signal, and a brightness signal; and

a memory in communication with the microcontroller to retain default gamma correction data and transformed gamma correction data;

said microcontroller executing a program process comprising the steps of:

receiving a new contrast signal,

receiving a new brightness signal,

testing if the new contrast signal and the new brightness signal are respectively equivalent to a default contrast signal and a default brightness signal,

if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal, designating the default gamma correction mapping table for determining a luminance value for said display,

if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal, transforming the default gamma correction mapping table as a function of the contrast signal and the brightness signal,

storing the transformed gamma correction mapping table to the memory, and

if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal, mapping the video signal to determine the

luminance level from the default gamma correction mapping table,

if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal, mapping the video signal to determine the luminance level from the transformed gamma correction mapping table,

generating a luminance signal from the luminance level, and

transferring the luminance signal to the display.

10. The display control system of claim 9 wherein the function is:

$$G\_new(i) = G\_orig((i * a) + b)$$

where:

i is a counter representing potential magnitude values of the video signal,

G_new(i) is the transformed value of the luminance value for an ***i*th** magnitude,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

11. The display control system of claim 9 wherein the function is:

$$G\_new(i) = G\_orig(C_i)$$

where:

$$\begin{aligned} C_i &= b \quad | i = 0 \\ C_i &= C_{i-1} + a \, | i > 0 \end{aligned}$$

C_i is a pointing variable to the luminance values in the original gamma correction mapping table,

i is a counter representing potential magnitude values of the video signal,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

12. A method for providing luminance value to a display comprising the steps of:

receiving a new contrast signal,

receiving a new brightness signal,

testing if the new contrast signal and the new brightness signal are respectively equivalent to a default contrast signal and a default brightness signal,

if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal, designating the default gamma correction mapping table for determining a luminance value for said display,

if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal, transforming the default gamma correction mapping table as a function of the contrast signal and the brightness signal,

storing the transformed gamma correction mapping table to the memory, and

if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal, mapping the video signal to determine the luminance level from the default gamma correction mapping table,

if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal, mapping the video signal to

determine the luminance level from the transformed gamma correction mapping table,

generating a luminance signal from the luminance level, and

transferring the luminance signal to the display.

13. The method of claim 12 wherein the function is:

$$G\_new(i) = G\_orig((i * a) + b)$$

where:

i is a counter representing potential magnitude values of the video signal,

G_new(i) is the transformed value of the luminance value for an ***i*th** magnitude,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

14. The method of claim 12 wherein the function is:

$$G\_new(i) = G\_orig(C_i)$$

where:

$$C_i = b \quad | i = 0$$
$$C_i = C_{i-1} + a \quad | i > 0$$

C_i is a pointing variable to the luminance values in the original gamma correction mapping table,

i is a counter representing potential magnitude values of the video signal,

***a** is a magnitude of the contrast signal, and*

***b** is a magnitude of the brightness signal.*

15. An apparatus for providing luminance value to a display comprising the steps of:

means for receiving a new contrast signal,

means for receiving a new brightness signal,

means for testing if the new contrast signal and the new brightness signal are respectively equivalent to a default contrast signal and a default brightness signal,

means for designating the default gamma correction mapping table for determining a luminance value for said display, if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal,

means for transforming the default gamma correction mapping table as a function of the contrast signal and the brightness signal, if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal,

means for storing the transformed gamma correction mapping table to the memory, and

means for mapping the video signal to determine the luminance level from the default gamma correction mapping table, if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal,

means for mapping the video signal to determine the luminance level from the transformed gamma correction mapping table, if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal,

means for generating a luminance signal from the luminance level, and

means for transferring the luminance signal to the display.

16. The apparatus of claim 15 wherein the function is:

$$G\_new(i) = G\_orig((i * a) + b)$$

where:

i is a counter representing potential magnitude values of the video signal,

G_new(i) is the transformed value of the luminance value for an ***i*th** magnitude,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

17. The apparatus of claim 15 wherein the function is:

$$G\_new(i) = G\_orig(C_i)$$

where:

$$\begin{aligned} C_i &= b \quad | i = 0 \\ C_i &= C_{i-1} + a \quad | i > 0 \end{aligned}$$

C_i is a pointing variable to the luminance values in the original gamma correction mapping table,

i is a counter representing potential magnitude values of the video signal,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

18. A medium for retaining a computer program which, when executed on a computing system, executes process for providing luminance value to a display comprising the steps of:

receiving a new contrast signal,

receiving a new brightness signal,

testing if the new contrast signal and the new brightness signal are respectively equivalent to a default contrast signal and a default brightness signal,

if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal, designating the default gamma correction mapping table for determining a luminance value for said display,

if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the

default brightness signal, transforming the default gamma correction mapping table as a function of the contrast signal and the brightness signal,

storing the transformed gamma correction mapping table to the memory, and

if the new contrast signal is equivalent to the default contrast signal and the brightness signal is equivalent to the default brightness signal, mapping the video signal to determine the luminance level from the default gamma correction mapping table,

if the new contrast signal is not equivalent to the default contrast signal and/or the brightness signal is not equivalent to the default brightness signal, mapping the video signal to determine the luminance level from the transformed gamma correction mapping table,

generating a luminance signal from the luminance level, and

transferring the luminance signal to the display.

19. The medium of claim 18 wherein the function is:

$$G\_new(i) = G\_orig((i * a) + b)$$

where:

i is a counter representing potential magnitude values of the video signal,

G_new(i) is the transformed value of the luminance value for an ***i*th** magnitude,

a *is a magnitude of the contrast signal, and*

b *is a magnitude of the brightness signal.*

20. The medium of claim 18 wherein the function is:

$$G\_new(i) = G\_orig(C_i)$$

where:

$$\begin{aligned} C_i &= b \quad | i = 0 \\ C_i &= C_{i-1} + a \, | i > 0 \end{aligned}$$

C_i is a pointing variable to the luminance values in the original gamma correction mapping table,

i is a counter representing potential magnitude values of the video signal,

is a magnitude of the contrast signal, and

b is a magnitude of the brightness signal.

21. The medium of claim 18 wherein said medium is selected from the program storage medium consisting of random access memory, read only memory, magnetic storage devices, and optical storage devices.